



PETROLEUM HYDRAULIC FLUID

NATO CODE H-520 - DCSEA 415/A - DEF STAN 91-48 ISS.2 - OM-18

DESCRIPTION

Hydraunycoil FH 5 is a petroleum-based hydraulic fluid with a viscosity of 14 cSt at 40°C. It contains anti-corrosion and anti-wear additives. Hydraunycoil FH 5 has an extremely wide operating temperature range (from -54°C to +135°C in air-tight circuits and -54°C to +90°C in open circuits) with a viscosity index exceeding 300.

APPLICATIONS

Hydraunycoil FH 5 is used in hydraulic systems of military aircraft (jet fighters, transport aircraft, helicopters) or missiles, as well as general purpose hydraulic fluid for ground equipment (tanks, artillery, etc.).

CHARACTERISTIC	UNIT	TYPICAL RESULT	DCSEA 415/A LIMITS	TEST METHOD
Density at 20°C	-	0.872	--	ASTM D 4052
Appearance	-	limpid red oil	red oil	Visual
Kinematic viscosity				
At 200°C		2.1	-	ASTM D 445
At 100°C	mm ² /s	5.39	min. 5.0	
At 40°C		14.12	min. 13.0	
At - 40°C		426	max. 500	
At - 54°C		1944	max. 2500	
Low temperature stability, 72 h @ - 54°C	-	pass	no gelling, clouding, crystallization, solidification or separation	FED-STD-791-3458
Flash point, Pensky-Martens	°C	91	min. 82	ASTM D 93
Auto-ignition temperature	°C	245	-	ASTM E 659
Pour point	°C	- 69	max. - 60	ASTM D 97
Total acid number	mg KOH/g	0.04	max. 0.20	ASTM D 664
Evaporation loss, 6 h at 71°C	%w	16.2	max. 20.0	ASTM D 972
Foaming test (tendency/stability) at 24°C	cm ³ /cm ³	42/0	max. 60/0	ASTM D 892
Steel on steel wear, 4-ball machine, scar diameter, 1h at 392N	mm	0.9	max. 1.0	ASTM D 4172
Corrosion and oxidative stability 168 h @ 135°C				
Acid number change	mg KOH/g	0.03	max. 0.2	FED-STD-791-5308
Viscosity change at 40°C	%	6.9	- 5.0 to + 20.0	
Steel weight change	mg/cm ²	0.0	max. +/- 0.2	
Cadmium plated steel w. ch.	mg/cm ²	0.0	max. +/- 0.2	
Aluminium weight change	mg/cm ²	0.0	max. +/- 0.2	
Magnesium weight change	mg/cm ²	0.0	max. +/- 0.2	
Copper weight change	mg/cm ²	0.0	max. +/- 0.6	
Elastomer NBR-L compatibility, 168h at 70°C	%v	28.5	19.0 to 30.0	FTM-S-791-3603
Copper corrosion, 72h at 135°C	rating	2a	max. 2e	ASTM D 130
Water content	mg/kg	57	max. 100	ASTM D 1533

The values above are typical values. They do not constitute any contractual commitment.

Sales specifications are available on request. The present technical data sheet replaces all the previous editions.